

# Mileage-Based User Fees

Road Commission for Oakland County

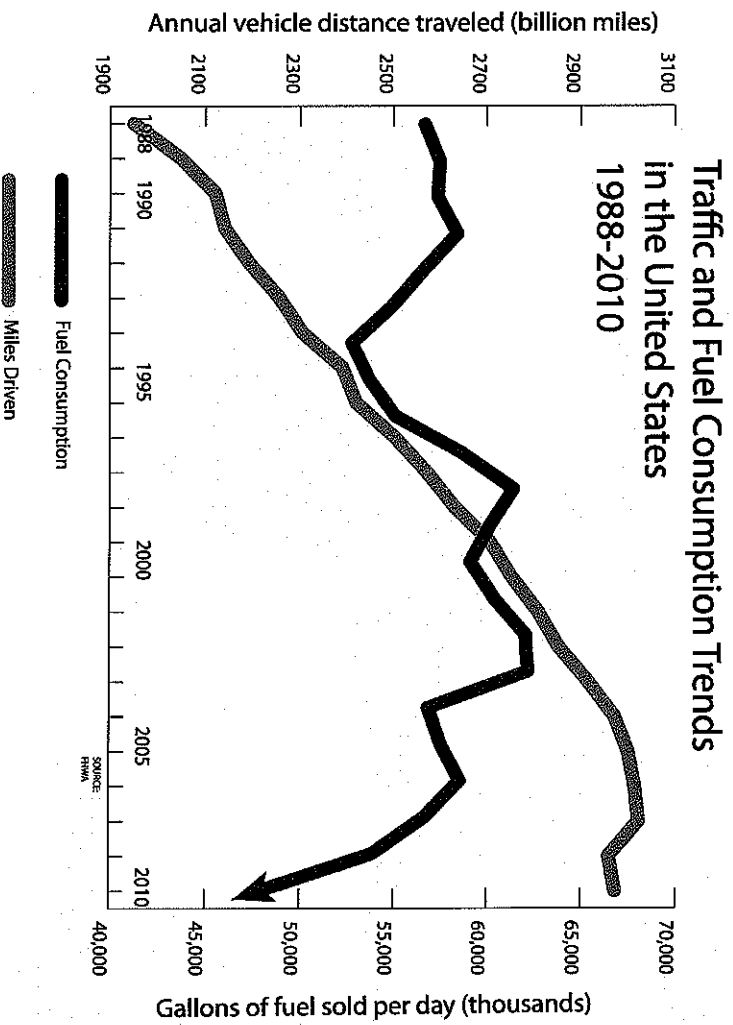
2011

# What is wrong with the current system?

As vehicles become more fuel efficient and more electric and hybrid vehicles are added to the nation's fleet, the ability of the traditional fuel tax to adequately fund the maintenance of the country's road system is declining. This situation is expected to worsen in the future.

Recent changes to the federal Corporate Average Fuel Economy (CAFE) standards that will require significantly more fuel-efficient vehicles in coming years will exacerbate this problem. At the same time, motorists are traveling further each year. That means we're using the road system more, but paying less to maintain it.





The graph below illustrates the problem.



# All road users are not paying the same

The current system does not treat all users equally. Some road users pay very little to use the roads, while others pay much more. Consider the examples shown below. The poor are paying more to use the roads, because typically they cannot afford the more-expensive hybrid and electric vehicles.

## Annual Gas Tax Revenue Generation

|   |   |   |   |
|---|---|---|---|
|  |  |  |  |
| <b>HUMMER</b><br>13 mpg<br>\$219<br>per year                                      | <b>CAMRY</b><br>21 mpg<br>\$135<br>per year                                       | <b>PRIUS</b><br>48 mpg<br>\$59<br>per year  | <b>VOLT</b><br>230 mpg<br>\$12<br>per year  |

## An Inequitable Solution

*Based on 15,000 miles driven per year.  
MPG calculations provided by [fuelconomy.gov](http://fuelconomy.gov)*

Note: Future "all-electric" vehicles would pay nothing for their use of the roads under the current system.

# Why MBUF?

An alternative is needed to **replace** traditional fuel taxes to ensure the transportation infrastructure is adequately funded in the future. The ideal solution would be a true "user fee," where motorists are charged based solely on how much they use the system.

A mileage-based user fee (MBUF) would be the most effective and most fair alternative.

- With MBUF, all users pay for their use of the roads, regardless of how their vehicles are powered.
- The fee would be based on miles driven (the more you use the roads, the more you pay).

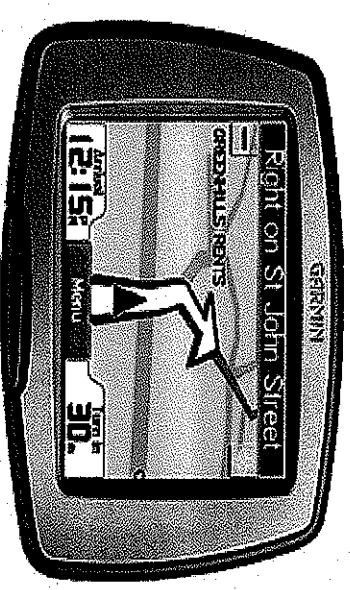
# MBUF recommended by Congressional commissions

Both commissions argued a gas-tax increase is needed in the short term, with MBUF being the long-term solution.

- **The National Surface Transportation Infrastructure Financing Commission's "Paving our Way, A New Framework for Transportation Finance"** (Feb. 2009).
  - "A federal funding system based on more direct forms of 'user-pay' charges, in the form of a charge for each mile driven, has emerged as the consensus choice for the future."
- **National Surface Transportation Policy and Revenue Study Commission's "Transportation for Tomorrow"** (Dec. 2007)
  - "Recent studies have concluded that a fee based on vehicle miles of travel (VMT) would be the preferred long-term alternative to the current fuel tax. One advantage of a VMT fee is that it could equitably be applied to any vehicle, no matter what type of fuel it used or what its fuel efficiency."

# How would it work?

- One means of collecting data: **GPS readings**
  - Charges can be based on:
    - Type of vehicle driven
    - Weight of vehicle
    - Jurisdiction of road used (which state)
    - Time of day & day of the week (congestion management)
    - Etc.
- Would represent the “ultimate user fee.”
- Would likely take 5-10 years to develop the technology & policies to implement.



# What about other funding methods?

RCOC analyzed 27 of 66 potential alternative funding methods and concluded MBUF was the only realistic, viable, long-term solution.

Two of the alternatives mentioned frequently by members of the public are toll roads and additional fees for trucks. Here are some reasons why these two alternatives would not solve the road-funding issue.

## Q. Why not toll roads?

- A.
- Tolls only work on limited-access highways.
  - Only 1% of Michigan roads are limited-access.
  - The revenue must be dedicated to maintaining the road from which the toll was collected.

## Q. Why not increase truck weight fees?

- A.
- Trucks SHOULD pay more toward the maintenance of Michigan's roads. But, they will never generate enough revenue to solve the problem.
  - Fees set high enough to pay for the road use/damage caused by trucks would result in large increase in the price of consumer goods.

At least 23 other states have already proposed studying or have conducted studies related to MBUF:





### **Example 1:**

## **Oregon Dept. of Transportation's Road User Fee Study**

- Completed 2007
- Study of 285 vehicles equipped with GPS units that recorded miles traveled.
- Cars downloaded data when fueling at selected gas stations.
- Drivers charged for miles traveled and credited for gas taxes that would have been paid.
- Jan. 2011: Oregon House Bill 2328 introduced (would apply vehicle road-usage charge for electric vehicles starting in 2014)

## **Example 2:**

# **University of Iowa Study**

- Currently in progress
- Funded through FHWA grant
- Volunteers in 12 regions across the US.
- Participant vehicles have on-board computer.
- Computer records charges based on road use.
- Info uploaded to data processing center.
- Study intended to:
  - Make sure system is reliable
  - Find out if drivers accept system, what they like, dislike.

### Example 3:

## Minnesota Dept. of Transportation

- 2004-07: Pay As You Drive (PAYD) test to learn about driver behavior changes triggered by variable cost of operating vehicle.
- 2011-12: Road-use test (call for <sup>500</sup>~~50~~ volunteers)
  - Feedback from motorists about using technology to gather mileage info.
  - Using smart phones & GPS.
  - State Legislature allocated \$5 million for test

# **Why Michigan should be involved:**

- We are:
  - Home to the domestic auto industry.
  - The No. 1 state for vehicle-related R&D with more than 330 R&D centers spending \$11.8 billion annually.
- MBUF is a growth industry that will produce new jobs and spin-off companies.
- Legislature should charge MDOT with leading an MBUF study utilizing auto industry & universities.